

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

41. (Currently Amended) A holding device adapted to receive at least one container containing a polymer array and a fluid, the holding device comprising a body with a rotational axis; said body comprising:

a body with a rotational axis;

a pair of end members extending from the rotational axis; and

one or more walls extending between the end members parallel to the rotational axis, and wherein said walls comprise at least one non-removable coupling member formed in one of the walls that is constructed and arranged to couple the container to said walls, such that when the container is coupled to the coupling member the polymer array is substantially perpendicular to the rotational axis. and the container is spaced apart from the rotational axis; and

at least one coupling element operably attached to the body in alignment with the rotational axis and adapted to couple the body to a rotation mechanism that rotates the body around the rotational axis.

42. (Currently Amended) A system for facilitating the mixing of a fluid, the system comprising:

at least one container containing a polymer array and a fluid; and

a holding device comprising a body with a rotational axis, a pair of end members extending from the rotational axis, one or more walls extending between the end members parallel to the rotational axis, and at least one coupling member formed in one of the walls that is constructed and arranged to couple the container to at least one of the walls, such that when the container is coupled to the coupling member the polymer array is substantially perpendicular to the rotational axis and the container is spaced apart from the rotational axis, and at least one coupling element operably attached to the body in alignment with the rotational axis

and adapted to couple the body to a rotation mechanism that rotates the body around the rotational axis.

43. (Previously Amended) A system as in claim 42, wherein the container defines a chamber, the chamber including a pair of closely spaced-apart faces that are separated by walls to define a narrow interior, wherein one of the faces defines a planar surface on which the polymer array is disposed.

44. (Original) A system as in claim 43, wherein the walls of the chamber are set at angles sufficient to agitate the fluid when rotated.

45. (Original) A system as in claim 42, wherein the container is only partially filled with the fluid to form a bubble therein.

46. (Original) A system as in claim 45, wherein the fluid contains at least one target molecule and the polymer array contains complementary probe sequences, wherein agitation of the fluid by the bubble increases the hybridization rate between the target molecule and the probe sequences.

47. (Original) A system as in claim 42, wherein the end members are perpendicular to the walls.

48. (Original) A system as in claim 42, wherein the coupling member comprises a pair of rails fixedly attached to one of the walls to form a slot for receiving the container.

49. (Original) A system as in claim 48, wherein the rails are perpendicular to the wall.

50. (Original) A system as in claim 42, further comprising an oven, wherein the holding device is rotatably disposed in the oven.

64. (Currently Amended) A holding device that is adapted to receive at least one container containing a polymer array and a fluid, the holding device comprising a body having a rotational axis; said body comprising:

a body having a rotational axis;

a pair of end members extending from the rotational axis;

one or more walls extending between the end members parallel to the rotational axis, wherein the rotational axis extends through one of the walls;

at least one coupling member formed in one of the walls that is constructed and arranged to engage a side of the container to couple the container to the wall, such that when the container is coupled to the coupling member the polymer array is substantially perpendicular to the rotational axis and the container is spaced-apart from the rotational axis to facilitate mixing of the fluid in the container; and

at least one coupling element operably attached to the body in alignment with the rotational axis and adapted to couple the body to a rotation mechanism.

65 (Currently Amended) A device as in claim 44 42, wherein the coupling member comprises an elongate slot formed within the side wall.